

RAW SEQUENCE LISTING

**The Biotechnology Systems Branch of the Scientific and Technical
Information Center (STIC) no errors detected.**

Application Serial Number: 10/512, 028
Source: ILFW16
Date Processed by STIC: 12/14/2006

ENTERED



IFW16

RAW SEQUENCE LISTING

DATE: 12/14/2006

PATENT APPLICATION: US/10/512,028

TIME: 13:58:18

Input Set : F:\SEQLIST506612000103.txt

Output Set: N:\CRF4\12142006\J512028.raw

3 <110> APPLICANT: EXPRESSION DIAGNOSTICS, INC.
 4 Wohlgemuth, Jay
 5 Fry, Kirk
 6 Woodward, Robert
 7 Ly, Ngoc
 9 <120> TITLE OF INVENTION: METHODS AND COMPOSITIONS FOR DIAGNOSING AND MONITORING
 10 AUTO IMMUNE AND CHRONIC INFLAMMATORY DISEASES
 12 <130> FILE REFERENCE: 506612000103
 14 <140> CURRENT APPLICATION NUMBER: 10/512,028
 C--> 15 <141> CURRENT FILING DATE: 2004-10-19
 17 <150> PRIOR APPLICATION NUMBER: PCT/US03/13015
 18 <151> PRIOR FILING DATE: 2003-04-24
 20 <160> NUMBER OF SEQ ID NOS: 1065
 22 <170> SOFTWARE: PatentIn version 3.2
 24 <210> SEQ ID NO: 1
 25 <211> LENGTH: 2140
 26 <212> TYPE: DNA
 27 <213> ORGANISM: Homo sapiens
 29 <400> SEQUENCE: 1
 30 agctgaggtg tgagcagctg ccgaagtcag ttccttggtg agccggagct gggcgcggtg 60
 32 tcgccgaggg accgaggcac tcagaggagg cgccatgtca gaaccggctg gggatgtccg 120
 34 tcagaaccca tgccgcagca aggcctgccg ccgcctcttc ggcccagtg acagcgagca 180
 36 gctgagccgc gactgtgatg cgctaattgc gggctgcac caggaggccc gtgagcgatg 240
 38 gaacttcgac ttgttcaccg agacaccact ggagggtgac ttgcctggg agcgtgtgcg 300
 40 gggccttggc ctgcccgaagc tctaccttc caccggggccc cggcgaggcc gggatgagtt 360
 42 gggaggaggc aggcggcctg gcacctcacc tgctctgctg caggggacag cagaggaaga 420
 44 ccatgtggac ctgtcactgt cttgtaccct tctgcctcgc tcaggggagc aggcgaagg 480
 46 gtccccaggt ggacctggag actctcaggg tcgaaaacgg cggcagacca gcatgacaga 540
 48 tttctaccac tccaaacgcc ggctgatctt ctccaaggagg aagccctaata ccgccacag 600
 50 gaagcctgca gtccctggaag cgcgagggcc tcaaaggccc gctctacatc ttctgcctta 660
 52 gtctcagttt gtgtgtctta attattattt gtgttttaatt taaacacct cctcatgtac 720
 54 ataccctggc cgcacctgac cccccagcct ctggcattag aattatttaa acaaaaacta 780
 56 ggcgggttgaa tgagaggttc ctaagagtgc tgggcatttt tattttatga aatactattt 840
 58 aaagcctcct catcccggtg tctccttttc ctctctcccg gaggttgggt gggccggctt 900
 60 catgccagct acttctcct cccacttgt ccgctgggtg gtaccctctg gaggggtgtg 960
 62 gctccttccc atcgctgtca caggcggtta tgaaattcac cccctttcct ggacactcag 1020
 64 acctgaattc tttttcattt gagaagtaaa cagatggcac tttgaagggg cctcaccgag 1080
 66 tgggggcac atcaaaaact ttggagtccc ctcacctcct ctaagggttg gcagggtgac 1140
 68 cctgaagtga gcacagccta gggctgagct ggggacctg taccctcctg gctcttgata 1200
 70 cccccctctg tcttgtgaag gcagggggaa ggtggggtag tggagcagac caccgccct 1260
 72 gccctcatgg cccctctgac ctgcactggg gagcccgctc cagtgttgag ccttttccct 1320
 74 ctttggtccc cctgtacctt ttgaggagcc ccagcttacc cttctctccc agctgggctc 1380
 76 tgcaattccc ctctgctgct gtccctcccc cttgtctttc ctttcagtac cctctcatgc 1440

(p8-6,7)

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/512,028

DATE: 12/14/2006

TIME: 13:58:18

Input Set : F:\SEQLIST506612000103.txt

Output Set : N:\CRF4\12142006\J512028.raw

```

78 tccaggtggc tctgaggtgc ctgtcccacc cccacccccca gctcaatgga ctggaagggg 1500
80 aagggacaca caagaagaag ggcaccctag ttctacctca ggcagctcaa gcagcgaccg 1560
82 cccctcctc tagctgtggg ggtgaggggc ccatgtggtg gcacaggccc ccttgagtgg 1620
84 gggtatctct gtgttagggg tatatgatgg gggagtagat ctttctagga gggagacact 1680
86 ggccctcaa atcgccagc gaccttctc atccaccccc tccctcccc gttcattgca 1740
88 ctttgattag cagcgaaca aggagtcaga cattttaaga tgggtggcagt agaggctatg 1800
90 gacagggcat gccacgtggg ctcatatggg gctgggagta gttgtcttct ctggcactaa 1860
92 cggtgagccc ctggaggcac tgaagtgtt agtgacttg gagtattggg gtctgacccc 1920
94 aaacaccttc cagctcctgt aacatactgg cctggactgt tttctctcgg ctcccatgt 1980
96 gtcttggttc ccgtttctcc acctagactg taaacctctc gagggcaggg accacaccct 2040
98 gtactgttct gtgtctttca cagctcctcc cacaatgctg aatatacagc aggtgctcaa 2100
100 taaatgattc ttagtgactt taaaaaaaaa aaaaaaaaaa 2140
103 <210> SEQ ID NO: 2
104 <211> LENGTH: 506
105 <212> TYPE: DNA
106 <213> ORGANISM: Homo sapiens
109 <220> FEATURE:
110 <221> NAME/KEY: misc_feature
111 <222> LOCATION: (462)..(462)
112 <223> OTHER INFORMATION: n is a, c, g, t or u
114 <220> FEATURE:
115 <221> NAME/KEY: misc_feature
116 <222> LOCATION: (491)..(491)
117 <223> OTHER INFORMATION: n is a, c, g, t or u
119 <220> FEATURE:
120 <221> NAME/KEY: misc_feature
121 <222> LOCATION: (498)..(498)
122 <223> OTHER INFORMATION: n is a, c, g, t or u
124 <400> SEQUENCE: 2
125 ctgtacatct atcgacatgg tgaggtagag catgtttggg aggaaagacg ttgaatccca 60
127 tttggtgaca gtgagcttga ggtgctgcca gaacactgca ctgaagatag gaggagactg 120
129 taggaaatac aagataggaa aggtctccac tgaaatgtta actctttctc tctaaacggc 180
131 catccaggcc tcaatgtctg cagtttctga tctgtgatta tgacttatcc aaatcttaca 240
133 tttcttaaaa atagtcatag atgaaggga tccacagtga tagttatatg gtgacattag 300
135 tggcttaaat tctaaataac tagaaactgt ataataggca aaactgtgag gcaaataaaa 360
137 tgcttctcaa actgtgtggc tcttatggg ttaatttgat ttggacctgt attaattctt 420
W--> 139 atggtgcta tactaacaaa ttccacaact tgggtggttta ancacacaca tttatctctt 480
141 ctgtctggag ncagaagnta aaatga 506
144 <210> SEQ ID NO: 3
145 <211> LENGTH: 1940
146 <212> TYPE: DNA
147 <213> ORGANISM: Homo sapiens
149 <400> SEQUENCE: 3
150 acccaggggc cggcctgcgc cttcccgcga ggcctggaca ctggttcaac acctgtgact 60
152 tcatgtgtgc gcgcgggcca cacctgcagt cacacctgta gccccctctg ccaagagatc 120
154 cataccgagg cagcgtcggt ggtacaagc cctcagtcca cacctgtgga cacctgtgac 180
156 acctggccac acgacctgtg gccgcggcct ggcgtctgct gcgacaggag cccttacctc 240
158 ccctgttata acacctgaca gccacctaac tgccccctga gaaggagcaa tggccttggc 300
160 tcttgagagg taagagcccc gccaccctc tccagatgcc agtccccgag cgccctgcag 360

```

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/512,028

DATE: 12/14/2006

TIME: 13:58:18

Input Set : F:\SEQLIST506612000103.txt

Output Set: N:\CRF4\12142006\J512028.raw

162	ccggccctga	ctctccgcgg	ccgggcaccc	gcagggcage	cccacgcgtg	ctgttcggag	420
164	agtggctcct	tggagagatc	agcagcggct	gctatgaggg	gctgcagtgg	ctggacgagg	480
166	cccgcacctg	tttccgcgtg	ccctggaagc	acttcgcgcg	caaggacctg	agcgaggccg	540
168	acgcgcgcat	cttcaaggcc	tgggctgtgg	cccgcggcag	gtggccgcct	agcagcaggg	600
170	gaggtggccc	gccccccgag	gctgagactg	cggagcgcgc	cggctggaaa	accaacttcc	660
172	gctgcgcact	gcgcagcacg	cgtcgtttcg	tgatgctgcg	agataactcg	ggggacccgg	720
174	ccgacccgca	caaggtgtac	gcgctcagcc	gggagctgtg	ctggcgagaa	ggcccaggca	780
176	cggaccagac	tgaggcagag	gccccgcgag	ctgtcccacc	accacagggg	gggccccag	840
178	ggccattcct	ggcacacaca	catgctggac	tccaagcccc	aggccccctc	cctgccccag	900
180	ctggtgacga	gggggacctc	ctgctccagg	cagtgaaca	gagctgcctg	gcagaccatc	960
182	tgctgacagc	gtcatggggg	gcagatccag	tcccaaccaa	ggctcctgga	gagggacaag	1020
184	aagggtcttc	cctgactggg	gcctgtgctg	gaggcccagg	gctccctgct	ggggagctgt	1080
186	acgggtgggc	agtagagacg	acccccagcc	ccgggcccc	gcccgcggca	ctaacgacag	1140
188	gcgaggccgc	ggccccagag	tccccgcacc	aggcagagcc	gtacctgtca	ccctccccaa	1200
190	gcgcctgcac	cgcggtgcaa	gagcccagcc	caggggcgct	ggacgtgacc	atcatgtaca	1260
192	agggccgcac	ggtgctgcag	aaggtggtgg	gacaccgcag	ctgcacgttc	ctatacggcc	1320
194	ccccagacct	agctgtccgg	gccacagacc	cccagcaggt	agcattcccc	agccctgccg	1380
196	agctcccgga	ccagaagcag	ctgcgtaca	cggaggaact	gctgcggcac	gtggccccctg	1440
198	ggttgacact	ggagcttcgg	gggcccacagc	tgtgggcccc	gcgcattggg	aagtgaagg	1500
200	tgtactggga	ggtgggcggc	ccccaggct	ccgccagccc	ctccacccca	gcctgcctgc	1560
202	tgctcgga	ctgtgacacc	cccatcttcg	acttcagagt	cttcttcgga	gagctggtgg	1620
204	aattccgggc	acggcagcgc	cgtggctccc	cacgctatac	catctacctg	ggcttcgggc	1680
206	aggacctgtc	agctgggagg	cccaaggaga	agagcctggt	cctggtgaag	ctggaacctt	1740
208	ggctgtgccg	agtgcacct	gagggcacgc	agcgtgaggg	tgtgtcttcc	ctggatagca	1800
210	gcagcctcag	cctctgcctg	tccagcgcca	acagcctcta	tgacgacatc	gagtgtctcc	1860
212	ttatggagct	ggagcagccc	gcctagaacc	cagtctaattg	agaactccag	aaagctggag	1920
214	cagcccacct	agagctggcc					1940
217	<210> SEQ ID NO: 4						
218	<211> LENGTH: 1714						
219	<212> TYPE: DNA						
220	<213> ORGANISM: Homo sapiens						
222	<400> SEQUENCE: 4						
223	ggggcatttt	gtgcctgcct	agctatccag	acagagcagc	taccctcagc	tctagctgat	60
225	actacagaca	gtacaacaga	tcaagaagta	tggcagtgac	aactcgtttg	acacggttgc	120
227	acgaaaagat	cctgcaaaat	catttttgag	ggaagcggct	tagccttctc	tataagggtta	180
229	gtgtccatgg	attccgtaat	ggagttttgc	ttgacagatg	ttgtaatcaa	gggcctactc	240
231	taacagtgat	ttatagttaa	gatcatatta	ttggagcata	tgcggaagag	agttaccagg	300
233	aaggaaagta	tgcttccatc	atcctttttg	cacttcaaga	tactaaaatt	tcagaatgga	360
235	aactaggact	atgtacacca	gaaacactgt	tttgttgtga	tgttacaaaa	tataactccc	420
237	caactaattt	ccagatagat	ggaagaaata	gaaaagtgat	tatggactta	aagacaatgg	480
239	aaaatcttgg	acttgctcaa	aattgtacta	tctctattca	ggattatgaa	gtttttcgat	540
241	gcgaagattc	actggatgaa	agaaagataa	aaggggtcat	tgagctcagg	aagagcttac	600
243	tgtctgcctt	gagaacttat	gaaccatatg	gatccctggt	tcaacaaata	cgaattctgc	660
245	tgctgggtcc	aattggagct	gggaagtcca	gctttttcaa	ctcagtgagg	tctgttttcc	720
247	aagggcattg	aacgcacag	gctttggtgg	gcactaatac	aactgggata	tctgagaagt	780
249	ataggacata	ctctattaga	gacgggaaag	atggcaaata	cctgccgttt	attctgtgtg	840
251	actcactggg	gctgagttag	aaagaaggcg	gcctgtgcag	ggatgacata	ttctatatct	900
253	tgaacggtaa	cattcgtgat	agataccagt	ttaatcccat	ggaatcaatc	aaattaaatc	960
255	atcatgacta	cattgattcc	ccatcgctga	aggacagaat	tcattgtgtg	gcatttgtat	1020

RAW SEQUENCE LISTING

DATE: 12/14/2006

PATENT APPLICATION: US/10/512,028

TIME: 13:58:18

Input Set : F:\SEQLIST506612000103.txt

Output Set: N:\CRF4\12142006\J512028.raw

```

257 ttgatgccag ctctattcaa tactttctcct ctcagatgat agtaaagatc aaaagaattc 1080
259 gaagggagtt ggtaaacgct ggtgtggtac atgtggcttt gctcactcat gtggatagca 1140
261 tggattttgat tacaaaaggt gaccttatag aaatagagag atgtgagcct gtgaggtcca 1200
263 agctagagga agtccaaaga aaacttggat ttgctctttc tgacatctcg gtggttagca 1260
265 attattcctc tgagtgggag ctggaccctg taaaggatgt tctaattctt tctgctctga 1320
267 gacgaatgct atgggctgca gatgacttct tagaggattt gccttttgag caaataggga 1380
269 atctaaggga ggaaattatc aactgtgcac aaggaaaaaa atagatatgt gaaaggttca 1440
271 cgtaaatttc ctcacatcac agaagattaa aattcagaaa ggagaaaaca cagaccaaag 1500
273 agaagtatct aagaccaaag ggatgtgttt tattaatgtc taggatgaag aaatgcatag 1560
275 aacattgtag tacttgtaaa taactagaaa taacatgatt tagtcataat tgtgaaaaat 1620
277 agtaataatt tttcttggat ttatgttctg tatctgtgaa aaaataaatt tcttataaaa 1680
279 ctcggaaaaa aaaaaaaaaa aaaaaaaaaa aaaa 1714
282 <210> SEQ ID NO: 5
283 <211> LENGTH: 6270
284 <212> TYPE: DNA
285 <213> ORGANISM: Homo sapiens
287 <400> SEQUENCE: 5
288 gccctgcttc cccttgccac tgcgcggggc ggccatggac ttgtacagca ccccgggcgc 60
290 tgcgctggac aggttcgtgg ccagaaggct gcagccgcgc aaggagtctg tagagaaggc 120
292 gcggcgcgct ctgggcgcgc tggccgctgc cctgagggag cgcgggggccc gcctcggtgc 180
294 tgetgccccg cgggtgctga aaactgtcaa gggaggctcc tcggggccggg gcacagctct 240
296 caaggggtggc tgtgattctg aacttgtcat ctctctcgac tgcttcaaga gctatgtgga 300
298 ccagaggggc cgccgtgcag agatcctcag tgagatgcgg gcacgcctgg aatcctggtg 360
300 gcagaaccca gtccctggtc tgagactcac gtttcttgag cagagcgtgc ctggggccct 420
302 gcagttccgc ctgacatccg tagatcttga ggactggatg gatgttagcc tgggtgcctgc 480
304 cttcaatgtc ctgggtcagg ccggctccgc ggtcaaacc cagccacaag tctactctac 540
306 cctcctcaac agtggctgcc aagggggcga gcatgcggcc tgcttcacag agctgcggag 600
308 gaactttgtg aacattcgcc cagccaagtt gaagaacct atcttgettg tgaagcactg 660
310 gtaccaccag gtgtgcctac aggggttgtg gaaggagacg ctgcccccg tctatgcct 720
312 ggaattgctg accatcttcg cctgggagca gggctgtaag aaggatgctt tcagcctagg 780
314 cgaaggcctc cgaactgtcc tgggcctgat ccaacagcat cagcacctgt gtgtttctg 840
316 gactgtcaac tatggcttcg aggacctgc agttgggcag ttcttgccgc ggcacgttaa 900
318 gagaccagc cctgtgatcc tggaccagc tgaccacaca tgggacctgg ggaatggggc 960
320 agcctggcac tgggatttgc atgccagga ggcagcatcc tgctatgacc acctatgctt 1020
322 tctgaggggg atgggggacc cagtgcagtc ttggaagggg ccgggccttc cacgtgctgg 1080
324 atgetcaggt ttgggccacc ccattcagct agacctaac cagaagacct ctgaaaacag 1140
326 caagagcctc aatgctgtgt acccaagagc agggagcaaa cctccctcat gccagctcc 1200
328 tggccccact gcggagccag catcgtaccc ctctgtgccg ggaatggcct tggacctgtc 1260
330 tcagatcccc accaaggagc tggaccgctt catccaggac cacctgaagc cgagccccc 1320
332 gttccaggag caggtgaaaa aggccatcga catcatcttg cgtgcctcc atgagaactg 1380
334 tgttcacaag gcctcaagag tcagtaaagg gggctcattt ggccggggca cagacctaa 1440
336 ggatggctgt gatgttgaac tcatcatctt cctcaactgc ttcacggact acaaggacca 1500
338 ggggccccgc cgcgcagaga tccttgatga gatgcgagcg cacgtagaat cctggtggca 1560
340 ggaccaggtg cccagcctga gccttcagtt tcctgagcag aatgtgcctg aggtctctga 1620
342 gttccagctg gtgtccacag ccctgaagag ctggacggat gttagcctgc tgctgcctt 1680
344 cgatgctgtg gggcagctca gttctggcac caaaccaaat cccaggtct actcagagct 1740
346 cctcaccagt ggctgccagg agggcgagca taaggcctgc ttcgcagagc tgcggaggaa 1800
348 cttcatgaac attcgccctg tcaagctgaa gaacctgatt ctgctggtga agcactggta 1860
350 ccgccaggtt gcggctcaga acaaaggaaa aggaccagcc cctgcctctc tgccccccagc 1920

```

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/512,028

DATE: 12/14/2006

TIME: 13:58:18

Input Set : F:\SEQLIST506612000103.txt

Output Set: N:\CRF4\12142006\J512028.raw

352	ctatgccctg	gagctcctca	ccatctttgc	ctgggagcag	ggctgcaggc	aggattgttt	1980
354	caacatggcc	caaggcttcc	ggacggtgct	ggggctcgtg	caacagcatc	agcagctctg	2040
356	tgtctactgg	acggtcaact	atagcactga	ggaccagacc	atgagaatgc	accttcttgg	2100
358	ccagcttcga	aaaccagac	ccctggtcct	ggaccccgct	gatccacact	ggaacgtggg	2160
360	ccacggtagc	tgggagctgt	tggcccagga	agcagcagcg	ctggggatgc	aggcctgctt	2220
362	tctgagtaga	gacgggacat	ctgtgcagcc	ctgggatgtg	atgccagccc	tcctttacca	2280
364	aacccagct	ggggaccttg	acaagttcat	cagtgaattt	ctccagccca	accgccagtt	2340
366	cctggcccag	gtgaacaagg	ccgttgatac	catctgttca	tttttgaagg	aaaactgctt	2400
368	ccggaattct	cccatacaag	tgatcaaggt	ggccaagggg	ggctcttcag	ccaaaggcac	2460
370	agctctgcga	ggccgctcag	atgccgacct	cgtggtgttc	ctcagctgct	tcagccagtt	2520
372	cactgagcag	ggcaacaagc	gggcccagat	catctccgag	atccgagccc	agctggaggc	2580
374	atgtcaacag	gagcggcagt	tcgaggtcaa	gtttgaagtc	tccaaatggg	agaatccccg	2640
376	cgtgctgagc	ttctcactga	catcccagac	gatgctggac	cagagtgtgg	actttgatgt	2700
378	gctgccagcc	tttgacgccc	taggccagct	ggctctctggc	tccaggccca	gctctcaagt	2760
380	ctacgtcgac	ctcatccaca	gctacagcaa	tgcgggagag	tactccacct	gcttcacaga	2820
382	gctacaacgg	gacttcatca	tctctcgccc	taccaagctg	aagagcctga	tccggctggt	2880
384	gaagcactgg	taccagcagt	gtaccaagat	ctccaagggg	agaggctccc	tacccccaca	2940
386	gcacgggctg	gaactcctga	ctgtgtatgc	ctgggagcag	ggcgggaagg	actcccagtt	3000
388	caacatggct	gagggcttcc	gcacggtcct	ggagctggtc	acccagtagc	gccagctctg	3060
390	tatctactgg	accatcaact	acaacgccaa	ggacaagact	gttgagagact	tcctgaaaca	3120
392	gcagcttcag	aagcccaggc	ctatcatcct	ggatccggct	gacccgacag	gcaacctggg	3180
394	ccacaatgcc	cgtggggacc	tgtgtggcaa	ggaagctgca	gcctgcacat	ctgccctgtg	3240
396	ctgcatggga	cggaatggca	tccccatcca	gccatggcca	gtgaaggctg	ctgtgtgaag	3300
398	ttgagaaaat	cagcggctct	actggatgaa	gagaagatgg	acaccagccc	tcagcatgag	3360
400	gaaattcagg	gtcccctacc	agatgagaga	gattgtgtac	atgtgtgtgt	gagcacatgt	3420
402	gtgcatgtgt	gtgcacacgt	gtgcatgtgt	gtgttttagt	gaatctgctc	tcacagctca	3480
404	cacactcccc	tgcctcccat	ggcttacaca	ctaggatcca	gactccatgg	tttgacacca	3540
406	gcctgcgttt	gcagcttctc	tgtcacttcc	atgactctat	cctcatacca	ccactgctgc	3600
408	ttcccaccca	gctgagaatg	ccccctcctc	cctgactcct	ctctgcccac	gcaaattagc	3660
410	tcacatcttt	cctcctgctg	caatccatcc	cttccctccc	ttggcctctc	cttgccaaat	3720
412	ctaaatactt	tatataggga	tggcagagag	ttcccactct	atctgtcagc	cacagtcatt	3780
414	tggtagctgg	tacctggagc	cttatcttct	gaagggtttt	aaagaatggc	caattagctg	3840
416	agaagaatta	tctaatacat	tagtgatgtc	tgcctgggat	gcagttagag	aaagtggtag	3900
418	tacaagtgcc	atgattgatt	agcaatgtct	gcactggata	tggaaaaaag	aagggtgctg	3960
420	cagggtttaca	gtgtatatgt	gggctattga	agagccctct	gagctcggtt	gctagcagga	4020
422	gagcatgccc	atattggctt	actttgtctg	ccacagacac	agacagaggg	agttgggaca	4080
424	tgcattgctat	ggggaccctc	ttgttgagca	cctaattgga	tgcctcttca	tgagaggcct	4140
426	cctttttctt	accttttatg	ctgcactcct	cccctagttt	acacatcttg	atgctgtggc	4200
428	tcagtttgcc	ttcctgaatt	tttattgggt	ccctgttttc	tctcctaaca	tgctgagatt	4260
430	ctgcatcccc	acagcctaaa	ctgagccagt	ggccaaacaa	ccgtgctcag	cctgtttctc	4320
432	tctgccctct	agagcaaggc	ccaccaggct	catccaggag	gctctcctga	cctcaagtcc	4380
434	aacaacagtg	tccacactag	tcaaggttca	gcccagaaaa	cagaaagcac	tctaggaatc	4440
436	ttaggcagaa	agggatttta	tctaaatcac	tggaaagggt	ggaggagcag	aaggcagagg	4500
438	ccaccactgg	actattgggt	tcaatattag	accactgtag	ccgaatcaga	ggccagagag	4560
440	cagccactgc	tactgctaat	gccaccacta	ccccctgcat	cactgccccca	catggacaaa	4620
442	actggagtcg	agacctaggt	tagattcctg	caaccacaaa	catccatcag	ggatggccag	4680
444	ctgccagagc	tgcgggaaga	cggatcccac	ctccctttct	tagcagaatc	taaattacag	4740
446	ccagacctct	ggctgcagag	gagctctgag	catgtatgat	tgaatgggtg	ccaagtgcc	4800
448	gggggaggag	tcccagcag	atgcatcctg	gccatctgtt	gcgtggatga	gggagtgggt	4860

RAW SEQUENCE LISTING ERROR SUMMARY
PATENT APPLICATION: US/10/512,028DATE: 12/14/2006
TIME: 13:58:19Input Set : F:\SEQLIST506612000103.txt
Output Set : N:\CRF4\12142006\J512028.raw**Please Note:**

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:2; N Pos. 462,491,498
Seq#:33; N Pos. 82,519,531
Seq#:55; N Pos. 228
Seq#:68; N Pos. 115,210
Seq#:82; N Pos. 8374,9044
Seq#:83; N Pos. 2141
Seq#:112; N Pos. 383
Seq#:127; N Pos. 462
Seq#:140; N Pos. 182
Seq#:141; N Pos. 159
Seq#:164; N Pos. 410,532
Seq#:186; N Pos. 722,735,744,752,764
Seq#:204; N Pos. 22
Seq#:235; N Pos. 292,293,294,295,296,297,298,299,300,301,302,303,304,305
Seq#:235; N Pos. 306,307,308,309,310,311,312,313,314,315,316,317,318,319
Seq#:235; N Pos. 320,321,322,323,324,490,491,492,493,494,495,496,497,498
Seq#:235; N Pos. 499,500,501,688,689,690,691,692,693,694,695,696,949,950
Seq#:235; N Pos. 951,952,953,954,955,956,957,958,959,960,961,962,963,964
Seq#:235; N Pos. 965,966,1720,1721,1722,1723,1724,1725,1726,1727,1728,1729
Seq#:235; N Pos. 1730,1731,1732,1733,1734,1834,1835,1836,1837,1838,1839
Seq#:235; N Pos. 1840,1841,1842,1843,1844,1845,1846,1847,1848,1849,1850
Seq#:235; N Pos. 1851,1852,1853,1854,1855,1856,1857,1858,1859,1860,1984
Seq#:235; N Pos. 1985,1986,1987,1988,1989,1990,1991,1992
Seq#:236; N Pos. 62,66,67,86,90,91,100,101
Seq#:243; N Pos. 678
Seq#:245; N Pos. 72,137
Seq#:250; N Pos. 173
Seq#:261; N Pos. 1,579
Seq#:265; N Pos. 13
Seq#:266; N Pos. 503
Seq#:273; N Pos. 417,418
Seq#:274; N Pos. 457,483
Seq#:280; N Pos. 374,417,425
Seq#:285; N Pos. 379,433
Seq#:294; N Pos. 21,653
Seq#:307; N Pos. 18,287,461,474,475,476,477,478,479,480,481,482,483,484,485
Seq#:307; N Pos. 486,487,488,489,490,491,492,493,494,495,496,497,498,499
Seq#:307; N Pos. 500,501,502,503,504,505,506,507,508,509,510,511,512,513
Seq#:307; N Pos. 514,515,516,517,518,519,520,521,522,523,524,525,526,527
Seq#:307; N Pos. 528,577,615
Seq#:327; N Pos. 74,100,145,154,181,191,241,246,252
Seq#:340; N Pos. 366
Seq#:344; N Pos. 15,122,127,131,133,136,137,138,146,147,148,156,162,164,165
Seq#:344; N Pos. 172,173,175,177,179,190,194,197,202,203,205,206,211,214

RAW SEQUENCE LISTING ERROR SUMMARY

DATE: 12/14/2006

PATENT APPLICATION: US/10/512,028

TIME: 13:58:19

Input Set : F:\SEQLIST506612000103.txt

Output Set: N:\CRF4\12142006\J512028.raw

Seq#:344; N Pos. 217,222,228,230,231,241,248,259,261,262,268,271,272,286

Seq#:344; N Pos. 291,296,307,325,326,330,331,333,335,342,344

Seq#:349; N Pos. 393,413,432,443,472

Seq#:361; N Pos. 254,257

Seq#:367; N Pos. 283

Seq#:382; N Pos. 304

Seq#:391; N Pos. 341,346,365

VERIFICATION SUMMARY

DATE: 12/14/2006

PATENT APPLICATION: US/10/512,028

TIME: 13:58:19

Input Set : F:\SEQLIST506612000103.txt

Output Set: N:\CRF4\12142006\J512028.raw

L:15 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:139 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2 after pos.:420
M:341 Repeated in SeqNo=2
L:3002 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:33 after pos.:60
M:341 Repeated in SeqNo=33
L:4322 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:55 after pos.:180
L:5342 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:68 after pos.:60
M:341 Repeated in SeqNo=68
L:6511 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:82 after pos.:8340
M:341 Repeated in SeqNo=82
L:6762 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:83 after pos.:2100
L:9545 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:112 after pos.:360
L:10726 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:127 after pos.:420
L:11925 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:140 after pos.:180
L:11952 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:141 after pos.:120
L:13472 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:164 after pos.:360
M:341 Repeated in SeqNo=164
L:14990 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:186 after pos.:720
L:16110 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:204 after pos.:0
L:18563 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:235 after pos.:240
M:341 Repeated in SeqNo=235
L:18660 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:236 after pos.:60
L:19147 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:243 after pos.:660
L:19254 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:245 after pos.:60
M:341 Repeated in SeqNo=245
L:19535 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:250 after pos.:120
L:20209 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:261 after pos.:0
M:341 Repeated in SeqNo=261
L:20399 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:265 after pos.:0
L:20464 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:266 after pos.:480
L:21113 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:273 after pos.:360
L:21149 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:274 after pos.:420
M:341 Repeated in SeqNo=274
L:21303 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:280 after pos.:360
M:341 Repeated in SeqNo=280
L:21551 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:285 after pos.:360
M:341 Repeated in SeqNo=285
L:21863 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:294 after pos.:0
M:341 Repeated in SeqNo=294
L:23409 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:307 after pos.:0
M:341 Repeated in SeqNo=307
L:25381 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:327 after pos.:60
M:341 Repeated in SeqNo=327
L:25942 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:340 after pos.:360
L:26300 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:344 after pos.:0
M:341 Repeated in SeqNo=344
L:26519 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:349 after pos.:360
M:341 Repeated in SeqNo=349

VERIFICATION SUMMARY

PATENT APPLICATION: US/10/512,028

DATE: 12/14/2006

TIME: 13:58:19

Input Set : F:\SEQLIST506612000103.txt

Output Set: N:\CRF4\12142006\J512028.raw

L:27428 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:361 after pos.:240

L:27704 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:367 after pos.:240

L:28979 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:382 after pos.:300